

**SECTION 11160**  
**LOADING DOCK EQUIPMENT**

**PART 1 - GENERAL**

**1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions apply to this Section.

**1.2 SUMMARY**

- A. This Section includes the following:
  - 1. Dock bumpers.
- B. Related Sections:
  - 1. Division 3 Section "Cast-in-Place Concrete" for concrete work for recessed dock and truck levelers.
  - 2. Division 5 Section "Metal Fabrications" for curb angles at edge of loading dock and around edge of recessed dock-leveler pit, and for platform edge channels.
  - 3. Division 16 Sections for electrical wiring and connections.

**1.3 DEFINITIONS**

- A. Operating Range: Maximum amount of travel above and below the dock level.
- B. Working Range: Recommended amount of travel above and below the dock level for which loading and unloading operations can take place.

**1.4 SUBMITTALS**

- A. Product Data: Include rated capacities, furnished specialties, accessories, details of construction relative to materials, dimensions of individual components, profiles, and finishes.
- B. Shop Drawings: Show details of fabrication and installation. Include plans, elevations, sections, details, and attachments to other work.
  - 1. Provide templates for anchors and bolts anchored to permanent construction.
- C. Maintenance Data: For loading dock equipment to include in the maintenance manuals specified in General and Supplementary Conditions. Include name, address, and telephone number of manufacturer's nearest authorized service representative.

**1.5 QUALITY ASSURANCE**

- A. Installer Qualifications: Engage an experienced installer who is an authorized representative of loading dock equipment manufacturer for both installation and maintenance of the type of units required for this Project.
  - 1. Maintenance Proximity: Not more than two hours' normal travel time from Installer's place of business to Project site.
- B. Source Limitations: Obtain each loading dock equipment component, including dock bumpers, levelers, lifts, and seals, as a complete unit from one source and by a single manufacturer.
- C. Preinstallation Conference: Conduct conference at Project site to comply with requirements of General and Supplementary Conditions' Section "Project Meetings."

**1.6 DELIVERY, STORAGE, AND HANDLING**

- A. Store and handle dock seals and shelters in a manner to avoid significant or permanent damage to fabric or frame.

1. Comply with manufacturer's written instructions for minimum and maximum temperature requirements for storage.

#### 1.7 COORDINATION

- A. Coordinate delivery of built-in anchoring devices to Project site to avoid delaying progress.

#### 1.8 WARRANTY

#### 1.9 MAINTENANCE SERVICE

- A. Initial Maintenance Service: Beginning at Substantial Completion, provide 12 months' full maintenance by skilled employees of dock equipment Installer. Include monthly preventive maintenance, repair or replacement of worn or defective components, lubrication, cleaning, and adjusting as required for proper equipment operation at rated speed and capacity. Provide parts and supplies as used in the manufacture and installation of original equipment.
  1. Perform maintenance, including emergency callback service, during normal working hours.
- B. Continuing Maintenance Service: Provide a continuing maintenance proposal from Installer to Owner, in the form of a standard yearly (or other period) maintenance agreement, starting on date initial maintenance service is concluded. State services, obligations, conditions, and terms for agreement period and for future renewal options.

### PART 2 - PRODUCTS

#### 2.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
  1. Dock Bumpers:
    - a. Durable Corporation.
    - b. Kelley Dock Systems.
    - c. Rite-Hite Corporation.
    - d. Serco; A United Dominion Company.

#### 2.2 DOCK BUMPERS

- A. Laminated-Tread Bumpers: Provide units of size indicated, fabricated from multiple plies cut from fabric-reinforced rubber tires to a uniform thickness of 4-1/2 inches . Laminate plies under pressure on 3/4-inch- diameter, steel supporting rods that are welded and bolted to 1/4-inch-thick, structural-steel angle closures with predrilled anchor holes. Size angles to provide not less than 1 inch of tread plies extending beyond the face of closure angles.
- B. Anchorage Devices: Provide anchor bolts, nuts, washers, bolts, sleeves, cast-in-place plate, and other anchorage devices as required to fasten bumpers securely in place and to suit installation type indicated. Hot-dip galvanize anchorage components.

### PART 3 - EXECUTION

#### 3.1 EXAMINATION

- A. Examine areas and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of loading dock equipment.
- B. Proceed with installation of loading dock equipment only after unsatisfactory conditions have been corrected.

### 3.2 PREPARATION

- A. General: Coordinate installation of loading dock equipment indicated to be attached to or recessed into concrete or masonry, and furnish anchoring devices with templates, diagrams, and instructions for their installation.

### 3.3 INSTALLATION, GENERAL

- A. General: Comply with manufacturer's detailed written instructions for installing loading dock equipment.

### 3.4 DOCK-BUMPER INSTALLATION

- A. Attach dock bumpers to structure in a manner that complies with requirements indicated for spacing, arrangement, and position relative to top of platform and anchorage.
  - 1. Bolted Attachment: Attach dock bumpers to preset anchor bolts embedded in concrete or to cast-in-place inserts or threaded studs welded to embedded steel plates or angles. If preset anchor bolts, cast-in-place inserts, or threaded studs welded to embedded plates or angles are not provided, attach dock bumpers by drilling and anchoring with expansion anchors and bolts.

### 3.5 CLEANING AND PROTECTING

- A. Restore marred, abraded surfaces to their original condition.
- B. Provide final protection and maintain conditions, in a manner acceptable to manufacturer and Installer, that ensure loading dock equipment is without damage or deterioration at the time of Substantial Completion.

**END OF SECTION 11160**